Middleware File Transport Services (Internal)

Middleware Infrastructure (JCAPS)

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Document Release History

Version	Author/Contributor	Date	Comments
0.1	Nate Eckler	1/30/2009	Initial Draft
1.0	Nate Eckler	2/27/2009	Release V.1
1.1	Nate Eckler	3/17/2009	Content changes and addition of Partner worksheet
1.3	Shan Bains	06/02/2009	Rewrite

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1. Purpose

This document illustrates the File Transport Services (FTS). This document has been divided into individual sections that detail specific aspects of the FTS service.
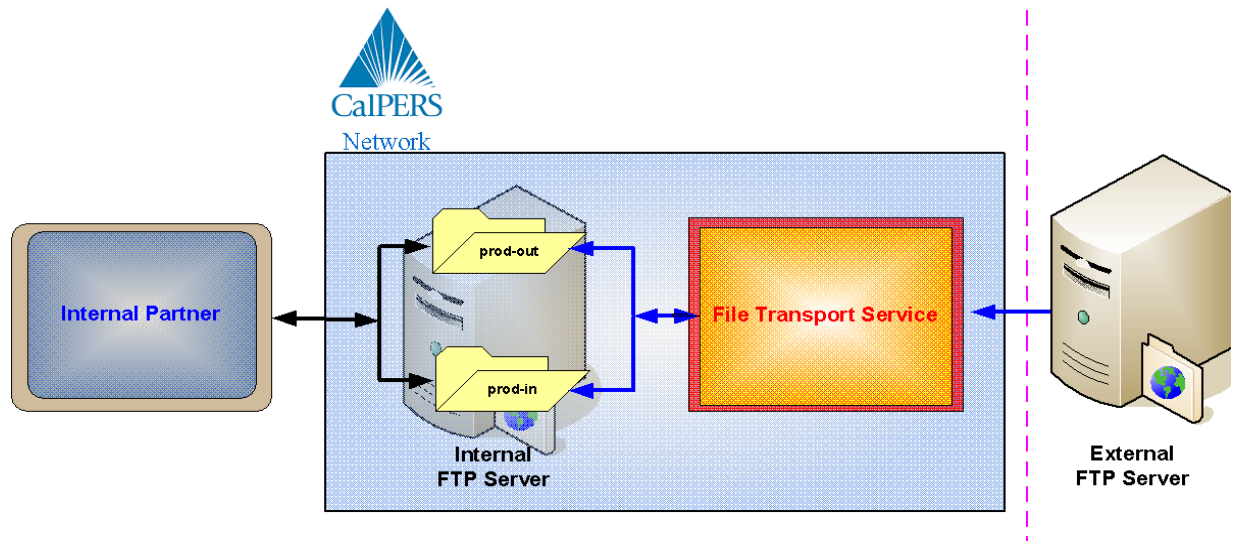

Figure 1- File Transport Services Logical Overview

2. File Transport Services Internal Processing Definitions

The processing requirements are listed below.

For inbound only:

Internal application will be provided with one folder - prod-in

- This folder will be used to retrieve files from partner

For outbound only:

Internal application will be provided with one folder - prod-out

- This folder is used for sending files to partner

For bidirectional (inbound & outbound):

Internal application will be provided with two folders - prod-in & prod-out

- The prod-in folder is used to retrieve files from partner.
- The prod-out folder is used for sending files to partner

Outbound files from CalPERS:

- A Public PGP key must be retrieved from the trading partner and placed on the appropriate key ring (applicable for FTS with encryption)
- The internal application will upload files to the prod-out folder on the middleware internal ftp server using Binary mode.
- Data file names must be all lower case and must adhere to the file name convention described later in this document.
- Two files must be uploaded for each transaction, one data file and one semaphore file.
  1. Data files will have a .dat / .xml file extension.
  2. Sempahore files will have a .sem file extension. The semaphore file will have the same name as the data file but with a .sem file extension. The semaphore file is an empty file that indicates that the data file is complete and ready for further processing.
  3. Example of a file pair of files sent for each transaction. *"filename*.dat and *"filename"*.sem

     or *"filename*.xml and *"filename"*.sem

- The CalPERS FTS service with encryption will retrieve the data file and the semaphore files from the internal FTP location prod-out directory at a pre-determined interval.
- The data file and the semaphore file will be deleted from the internal FTP location prod-out directory after successful processing.
- An Email message will be sent when the files are successfully processed and delivered to the external FTP server trading partner location.
- Refer to the <u>Middleware File Transport Services (External) document</u> for further processing of outbound files to an external trading partner.
- Data files will be encrypted using GnuPG (GPG) based on the OpenPGP standard (applicable for FTS with encryption).

Inbound files to CalPERS:

- A CalPERS Public key must be sent to the trading partner prior to this process.
- Refer to the <u>Middleware File Transport Services (External) document</u> for pre-processing of inbound files from an external trading partner (applicable for FTS with decryption).
- Data file names will be all lower case.
- Two files will be sent to the prod-in directory for each inbound transaction, one data file and one semaphore file.
  1. Data files will have a .dat or .xml file extension.
  2. Sempahore files have a .sem file extension. The semaphore file is an empty file that indicates that the data file is complete and ready for further processing.

3. Example of a file pair of files sent for each transaction. "*filename*.dat and "*filename*".sem or "*filename*.xml and "*filename*".sem

- The internal application will process the .dat / .xml file and then rename it to a .fin file extension. The renaming of the data file will indicate that the file has been processed and can be deleted by the FTS cleanup process.

a. File Naming Convention

Both inbound and outbound files must adhere to the file naming convention described below.

The standard format for file names:

A) *yyyymmddhhmiss_sss_p(n).xxx*

Where:

yyyy is the year

mm is the month

dd is the day.

hh is the hours using a 24 hour clock

mi is the minutes

ss is the seconds

sss is the milliseconds, (use 000 if milliseconds can not be produced)

p(n) application specific area of the file name (project defined)

xxx is the file extension (.dat / .xml) for data files

b. Post-Deployment Support

Once created, support staff will actively monitor the File Transport Directories for two weeks to ensure proper file operations. Middleware staff will transition support activities to traditional notification-based monitoring.

c. Prerequisite Checklist

There is a useful checklist to ensure all requirements are met for this process and will assist in ensuring that the process will go as expediently as possible. Gathering of the following data will minimize downtime in ensuring all prerequisites are met. Contact support staff to obtain a copy of the checklist.